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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/083,568 | 02/27/2002 | William C. Benavitz | A8130.0078/P078 | 5899 |
| 24998 | 7590 | 06/06/2006 | EXAMINER | |
| DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP | | | DAWSON, GLENN K | |
| 2101 L Street, NW | | | ART UNIT | |
| Washington, DC 20037 | | | PAPER NUMBER | |

3731

DATE MAILED: 06/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/083,568 | Applicant(s) BENAVITZ ET AL. | |
| | Examiner Glenn K. Dawson | Art Unit 3731 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-9, 11, 17 and 20-23 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-9, 11, 17 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05-01-2006 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Green, et al.-5643319.

Green discloses a suture anchor 304 having truncated conical barbs and an insert-molded suture 306. The anchor is used to attach soft tissue to a bone. The driver shaft has a round recess in the distal end and a tapered slot (see in fig. 7 and 8) which intersects with the recess. The slot extends between two opposed portions (side walls of slot oppose each other) of the wall of the driver shaft.

Claim 11 is rejected under 35 U.S.C. 102(b) as being anticipated by Anspach-5102421.

Anspach discloses a suture anchor and driver, wherein the driver as shown in fig. 6 has a circular recess 54 receiving a cylindrical round head 14 of a suture anchor, and a slot (bore 54 and including 56 as seen in fig. 5 and 6). The distal end of the slot goes to the distal end of the shaft 60. As shown in fig. 5, the sidewalls of the slot are opposed portions of the wall of the distal end of the driver shaft.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

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were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 8 is rejected under 35 U.S.C. 102(b) as being unpatentable over Green, et al.-5643319.

Green discloses a suture anchor 304 having truncated conical barbs and an insert-molded suture 306. The anchor is used to attach soft tissue to a bone. The driver shaft has a round recess in the distal end and a tapered slot (see in fig. 7 and 8) which intersects with the recess. The slot extends between two opposed portions (side walls of slot oppose each other) of the wall of the driver shaft. As far as the recess being "tapered", the examiner contends that this is a mere obvious design choice, noting that there was no disclosed criticality, nor statement that it solved a particular problem or was for a particular purpose, and the examiner contends that applicant's invention would have worked equally as well with the recess being tapered or non-tapered. See col. 8 lines 53-63; col. 9 lines 17-23; col. 10 lines 27-47.

Claim 8 is rejected under 35 U.S.C. 102(b) as being unpatentable over Anspach-5102421.

Anspach discloses a suture anchor and driver, wherein the driver as shown in fig. 6 has a circular recess 54 receiving a cylindrical round head 14 of a suture anchor, and a slot (bore 54 and including 56 as seen in fig. 5 and 6). The distal end of the slot goes

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to the distal end of the shaft 60. As shown in fig. 5, the sidewalls of the slot are opposed portions of the wall of the distal end of the driver shaft. As far as the recess being "tapered", the examiner contends that this is a mere obvious design choice, noting that there was no disclosed criticality, nor statement that it solved a particular problem or was for a particular purpose, and the examiner contends that applicant's invention would have worked equally as well with the recess being tapered or non-tapered.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Larsen, et al.-5993459.

Larsen discloses a cannulated shaft and handle with a round recess and distal slot formed though two opposing portions of the distal end of the shaft enclosing the recess. See fig. 7-10. As far as the recess being "tapered", the examiner contends that this is a mere obvious design choice, noting that there was no disclosed criticality, nor statement that it solved a particular problem or was for a particular purpose, and the examiner contends that applicant's invention would have worked equally as well with the recess being tapered or non-tapered.

Claims 9,17,20 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anspach-'421 in view of Grafton, et al.-5964783.

Anspach discloses a suture embedded in a bore in a suture anchor. The anchor has a cylindrical round head 14 and truncated cone barbs. However, a suture eyelet being insert molded into the anchor is not disclosed. Grafton discloses that it was known to insert mold a suture with eyelet into an anchor. It would have been obvious to have formed the attachment of a suture eyelet to the anchor of Anspach using insert molding

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techniques, as such produces a suture anchor/suture combination which need not be countersunk avoiding abrasion with the bone. Anspach also fails to disclose the material being bioabsorbable. Grafton teaches of a bioabsorbable suture anchor. It would have been obvious to have made the anchor of Anspach bioabsorbable so that the possibility of long-term effects would be mitigated, and no subsequent procedures would be needed to remove it if deemed necessary.

Claims 6 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thal-5569306 in view of Grafton-'783 and Fucci, et al.-5697950.

Thal discloses the invention including a molded suture/anchor combination; however, the suture being "insert molded" into the anchor is not disclosed. However, Grafton discloses that it was known to insert mold a suture into an anchor. It would have been obvious to have formed the attachment of the suture of Thal to the anchor using insert molding techniques, as such produces a suture anchor/suture combination which need not be countersunk avoiding abrasion with the bone. To have tied the suture to the eyelet instead of using the stop means disclosed by Thal would have been obvious as a mere obvious known alternative, as illustrated by Fucci in col. 1 lines 32-58.

Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tran-6582453 in view of Larsen, et al.-5993459 and Grafton-'783.

Tran discloses a method including the placating of tissue, forming a passage in bone tissue, passage of the suture through a suture eyelet of a suture anchor placed in the bone passage and then tying a knot in the suture. However, the suture anchor being insert molded and the driver having a slot for receiving the suture are not disclosed.

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However, Grafton discloses an insert molded suture eyelet on a suture anchor. It would have been obvious to have formed the attachment of the suture of Tran to the anchor using insert molding techniques, as such produces a suture anchor/suture combination which need not be countersunk avoiding abrasion with the bone. It also would have been obvious to have merely used the suture anchor of Grafton to perform the method of Tran as merely being an obvious well-known alternative type of suture anchor which would not abrade bone or tissue. Additionally, Larsen discloses a driver for an anchor having a side slot receiving the suture. It would have been obvious to have used a driver with a side slot in order to safely accommodate the suture attached to the anchor without the possibility of shredding the suture during implantation.

Response to Arguments

As stated above both of the references disclosing the shafts with slots meet the broad claim language.

Applicant has argued against the references used in a 103 rejection individually. However, as outlined above the cited combinations make obvious each of the claim limitations. Although any single reference may not disclose all of the claim limitations, the prior art when properly combined teaches all of the cited limitations. Each of the references concerns sutures and suture anchors and therefore the references are all analogous art.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Glenn K. Dawson whose telephone number is 571-272-4694. The examiner can normally be reached on M-Th 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Glenn K Dawson
Primary Examiner
Art Unit 3731

Gkd
30 May 2006